FATIMA COLLEGE (AUTONOMOUS), MADURAI – 625018

NAME OF THE PROGRAMME: B.SC. CHEMISTRY **PROGRAMME CODE: UACH**

PROGRAMME OUTCOMES:

The learners will be able to

PO1: Apply acquired scientific knowledge to solve complex issues.

PO2: Attain Analytical skills to solve complex cultural, societal and environmental issues.

PO3: Employ latest and updated tools and technologies to analyse complex issues.

PO4: Demonstrate Professional Ethics that foster Community, Nation and Environment Building Initiatives.

PROGRAMME SPECIFIC OUTCOMES:-

PSO 1: Thorough understanding of all basic concepts and theories pertaining to Chemistry

PSO 2: A comprehensive view of bonding, structure, reactivity and stability of chemical species.

PSO 3: An overall perspective view of physical principles that govern all physical and chemical transformations.

PSO 4: Basic knowledge about instrumentation involving UV, IR, ESR and NMR

PSO 5: Hands on experience of laboratory experiments both qualitative and quantitative

PSO 6: Project undertaking enables presentation of results and strengthens the learners in lab to land procedures that nurture societal need and environmental protection.

PSO 7: Diversified informative sources that equip learners to enter varied fields

PSO 8: Additional in-puts of using appropriate software related to Chemistry and chemical calculate.

2019 - 2020

COURSE CODE	COURSE TITLE	NATURE OF THE COURSE (LOCAL/ NATIONAL/ REGIONAL/ GLOBAL)	COURSE DESCRIPTION	COURSE OUTCOMES
19C1CC1	Inorganic Chemistry -I	Regional	This course deals with the basics of chemistry required for UG programme	CO1: To comprehend the fundamental properties of atoms, molecules, and the various states of matte CO2: To classify the electronic structure of atoms and its influence on chemical properties CO3: To describe the periodic table as a list of elements arranged so as to

				demonstrate trends in their physical and chemical properties. CO4: To describe the difference(s) between strong acids/bases and weak acids/bases. CO5: To illustrate the factors affecting the strength of acid and bases CO5: To acquire the knowledge of properties, characteristics and application of non-aqueous solvents CO6: To explain the atomic, physical and chemical properties of alkali metals CO7: To recognize the anomalous properties of Li and compares the properties Li with those other alkali metals

19C1CC2	Organic Chemistry -I	Global	This paper deals with electron displacement effects, Fundamentals of reaction mechanism and prepration, properties uses of alkanes, cycloalkanes	CO1: Gain a thorough knowledge about the chemistry of aliphatic saturated compounds CO2: Analyze the behaviour of an organic compound through electron displacement effects. CO3: Describe the structure and stability of different types of intermediates involved in reaction mechanism. CO4: Know the nomenclature ,classification of alkanes, alkyl halides. CO5: To derive and familiarise the mechanisms of nucleophilic substitution reactions of organic compounds.

19C1CC3	Volumetric Analysis-I	Global	This course trains the students to prepare the solutions of different concentrations and to estimate quantitatively by different techniques	CO1: To prepare solutions of desired concentrations . CO2: To apply the principles of volumetric analysis in acid base, permanganometry, and iodometric titrations. CO3: To compare the principles behind all types of titrations CO4: To identify suitable indicators for a particular reaction.
19C1NME	Profitable Home Industries	Global	This course is designed for the students to become self- employed by training them in the preparation of household articles	CO1: Gain knowledge about the fundamental chemistry involved in dairy products, factors affecting quality, quantity of milk and metals and non-metals used in dairy industries CO2: Recognize the important nutrients

				present in food CO3: Learn the ingredients required for the preparation of various types of shampoos, skin powder, nail polish etc CO4: Demonstrate the preparation of some home products like candle. Detergent powder, soap oil, ink ,phenoyl and computer sambirani
19Z1ACC1	Allied Chemistry-I	National	This paper deals with the concept of chemical bonding – detailed study of VB Theory & MO Theory and types of Organic Reactions	CO1: To predict the geometry of any molecule with the help of VB and VSEPR theory CO2: To construct M.O diagram for homo nuclear diatomic molecule CO3: To categorize the types of organic reactions. CO4: To describe the chemistry of

				carbohydrates. CO5: To classify reactions involved in volumetric analysis
19N1ACC1	Allied Chemistry-I	National	This paper deals with the concept of chemical bonding – detailed study of VB Theory & MO Theory. Types of Organic Reactions	CO1: To predict the geometry of any molecule with the help of VB and VSEPR theory CO2: To construct M.O diagram for homo nuclear diatomic molecule CO3: To categorize the types of organic reactions. CO4: To describe the chemistry of carbohydrates. CO5: To classify reactions involved in volumetric analysis
19C2CC4	Inorganic Chemistry -II	Regional	This paper deals with the theories of bonding	CO1: To categorize the soft, hard and border line acids and bases.

			and the chemistry of III, IV, V & VI group elements.	CO2: To predict the structure of an ionic crystal through radius – ratio rule. CO3: To understand the synthetic importance of organo metallic compounds of Al, B and Si CO4: To criticize the chemistry of hydrazine and hydroxyl amine CO5: To list out the allotropic modifications of oxygen and sulphur CO6: To draw the structure of oxoacids and oxy halides of sulphur
19C2CC5	Organic Chemistry – II	Regional	This course covers the topics alkenes, alkadienes, alkynes and organo metallics	CO1: Gain a basic knowledge about the chemistry of aliphatic unsaturated compounds like alkenes, alkynes and alkadienes

			with special emphasis on their synthetic applications	,organometallics, alcohols and ethers CO2: Recognise different types of chemical reactions such as addition, elimination, substitution, oxidation and reduction CO3: Enlighten the relationship between the structure and acidity and basicity of the organic compounds CO4: Use IUPAC nomenclature to name and draw a range of organic compounds with number more than 8 carbon atoms CO5: Describe and give reasons for the following physical properties of organic compounds: melting and

				boiling point and solubility
19C2CC6	Volumetric Analysis-II	Global	This course trains the students to prepare the solutions of different concentrations and to estimate quantitatively by different techniques	CO1: To apply the principles of volumetric analysis in various estimations. CO2: To estimate the amount of calcium using permangano metric method CO3: To estimate the amount of calcium and magnesium using EDTA method. CO4: To apply the principle of Argentimetry in the estimation of chlorideions. CO5: To understand the principles behind the estimations of phenol & Aniline iodometrically.
19Z1ACC2	Allied Chemistry	National	.	CO1; Describe the principles and

	Practicals -II		This course trains the students to prepare the solutions of different concentrations and to estimate quantitatively by different techniques	procedures of various titrimetric methods CO2: identify suitable indicators for a particular reaction CO3: know the various terms such as standard solution, normality, molality, molarity, equivalent weight and molecular weight. CO4: select the specific titric method to estimate the amount of analyte present in the given solution. CO5: Apply the expressions and equations to calculate the strength of solutions
19N1ACC2	Allied Chemistry Practicals - II	National	This course trains the students to prepare the solutions of	CO1: Describe the principles and procedures of various titri metric methods

			different concentrations and to estimate quantitatively by different techniques	CO2: identify suitable indicators for a particular reaction CO3: know the various terms such as standard solution, normality, molality, molarity, equivalent weight and molecular weight. CO4: select the specific titric method to estimate the amount of analyte present in the given solution. CO5: Apply the expressions and equations to calculate the strength of solutions
19C2NME	Profitable Home Industries	Global	This course is designed for the students to become self-employed by training them in the preparation of	CO1: Gain knowledge about the fundamental chemistry involved in dairy products, factors affecting quality, quantity of milk and metals and non-metals used

			household articles	in dairy industries CO2: Recognize the important nutrients present in food CO3: Learn the ingredients required for the preparation of various types of shampoos, skin powder, nail polish etc CO4: Demonstrate the preparation of some home products like candle. CO5:detergentpowder,soapoil,ink ,phenoyl and computer sambirani
19Z2ACC3	Allied Chemistry- II	National	This paper gives a basic understanding of chemistry to other major students as allied paper.	CO1: To apply the rules for naming the metal complexes / coordination compounds. CO2: To recognize the applications of metal complexes in biological systems.

				CO3: To analyze the various organic compounds qualitatively CO4: To understand the procedure involved in detection of elements. CO5: To understand the kinetics of a chemical reaction and to predict the order of a particular reaction CO6: To evaluate the types of catalysis and theories of catalysis
19N2ACC3	Allied Chemistry- II	National	This paper gives a basic understanding of chemistry to other major students as allied paper.	CO1: To apply the rules for naming the metal complexes / coordination compounds. CO2: To recognize the applications of metal complexes in biological systems. CO3: To analyze the various organic compound qualitatively

				CO4: To understand the procedure involved in detection of elements. CO5: To understand the kinetics of a chemical reaction and to predict the order of a particular reaction CO6: To evaluate the types of catalysis and theories of catalysis
19Z2ACC4	Allied Chemistry Practicals- II	National	This course trains the students to analyse the given organic compound	CO1: Gain the knowledge of appearance, colour, physical state, and odour of organic substances. CO2: Distinguish whether the given compound is Aliphatic or Aromatic, and Saturated or Unsaturated. CO3: Perform the confirmatory test for various functional groups present

				in the given organic compound. CO4: Recognize the usage of apparatus and laboratory reagents. CO5: Relate the experimental observations with theory behind practicals.
19N2ACC4	Allied Chemistry Practicals-II	National	This course trains the students to analyse the given organic compound	CO1: Gain the knowledge of appearance, colour, physical state, and odour of organic substances. CO2: Distinguish whether the given compound is Aliphatic or Aromatic, and Saturated or Unsaturated. CO3: Perform the confirmatory test for various functional groups present in the given organic compound.

				CO4: Recognize the usage of apparatus and laboratory reagents. CO5: Relate the experimental observations with theory behind practicals.
Course Code	**Course Title**	**Nature of the course (Local/ National/ Regional/ Global)**	**Course description**	**Course Objectives**
C3CC6	Organic And Inorganic Chemistry	Regional	This paper deals with the concept of aromaticity and the inorganic chemistry part of the paper deals with the general characteristics of elements	• To interpret the concept of aromaticity and the main properties of aromatic compounds. • To correlate different bond types of carbon and its hybrid orbitals.
C3CC7	Physical	Regional	This course provides a	• Calculate mass defect, packing

	Chemistry-I		detailed study of Gaseous state, Solutions, Theory of dilute, solutions and Radio activity	fraction and binding energy for any nuclei • Predict the growing rate, mechanism and age of plants using radioactive elements
C3SB1	Agricultural Chemistry	Global	The Course gives an introduction to soil and fertilizers and also gives the effect of pesticides.	• To recognise the importance of soil • To recall the names of fertilizers
P3ACC1	Allied Chemistry-I	National	This paper deals with topics namely bonding and shapes of molecules. Certain physical chemistry portions such as chemical kinetics, thermodynamics are	• To comprehend the fundamental theories of Valence Bond, types of overlapping and VSEPR. • To classify the shapes of covalent molecules

			included	
C4CC8	Inorganic Chemistry-III	Global	The Course enables the students to gain knowledge on the chemistry of coordination compounds, carbonyl compounds and "F' block elements.	• Get an overview about the reaction mechanism of metal complexes • Know the structure and bonding of important coordination compounds
C4CC9	Physical Chemistry-I	Regional	This course provides an elaborate study of chemical kinetics, solid state and distribution law.	• To calculate lattice energy of crystalline solids • To distinguish order and molecularity of a chemical reaction
C4SB2	Natural And Synthetic Dyes	Global	This paper highlights the uses of dyes in our day today life.	• To know and comprehend the principle and theories of dyes • To identify the chromophoric groups

			es in dyes	and auxochrom
P4ACC2	Allied Chemistry-II	National	This course gives a detailed study of periodic properties, electrochemistry & photochemistry.	• To predict the periodicity in the periodic table. • To construct an electrochemical cell diagram and identifying the anode, cathode.
C4CC10	Qualitative Analysis	Global	This paper involves the analysis of inorganic mixtures an acid and basic radicals qualitatively.	• To identify the group cations • To analyse the presence acid and basic radicals in the given mixture of acid
P4ACC3	Allied Chemistry Practicals	National	This course trains the students to estimate the solutions quantitatively by different techniques.	• To select the specific titric method to estimate the amount of analyte present in the given solution. • To apply the expressions and equations to calculate the strength of solutions

C5CC11	Organic Chemistry – III	Regional	This course provides an elaborate study of the preparation, reactions and synthetic application of organic compounds	• To analyze the synthetic importance of reactive methylene compounds • To generalize the characteristic features of optical isomers and geometrical isomers
C5ME1	Spectroscopy	Global	This paper will be of much use of the students to take up higher studies.	• To identify various functional groups present in organic molecules using IR frequency. • To predict the number and nature of protons/ carbons in organic molecules in 1H-NMR/ 13C-NMR spectroscopy
C5ME2	Bio Chemistry	Regional	This course gives an overview of classification of enzyme and mechanism of enzyme	• To identify the various metabolic reactions • To understand the importance of nucleic acids

			action	
C5SB3	Medicinal Chemistry	Global	This paper highlights the causes of common diseases the role of vitamin for the healthy life and the importance of hormones	• To study the mechanism of drug action • To determine the designing and binding of drugs with receptors
C5SB4	Nano Chemistry	Global	This paper deals with study of synthesis, properties, structure and applications of nano particles.	• Learn about the background on Nano science . • Understand the synthesis of nano materials and their application and the impact of nano materials on environment
C6CC13	Organic Chemistry-IV	Regional	This paper includes the topics, Polynuclear Hydrocarbons, Heterocyclic	• To explicate the structures of Citral, Dipentene and Camphor. • To distinguish the properties of quinolin and isoquinolin

			Compounds, Amino Acids and Proteins, Alkaloids and terpenes.	
C6CC14	Physical Chemistry- IV	Regional	This course gives a detailed study of electrochemistry & photochemistry	• Calculate the cell potential for a nonstandard cell. • Know the chemical reactions used in a lead-acid battery
C6ME3	Advanced Organic Chemistry	Global	The course is offered to expose the advanced topics in the field of organic chemistry.	• To sketch Frontier molecular orbitals in photochemistry. • To differentiate the molecular rearrangements and to solve the simple problems
C6ME5	Advanced Physical Chemistry	Global	The course is offered to expose the advanced topics in the field of physical chemistry.	• To understand the theories behind the spectral techniques like MW.IR,NMR and ESR • To study the applications of the above techniques to elucidate the

				structures of molecules
C6SB5	Computers in Chemistry	Global	This course deals with the use of computers in molecular modeling and drug design and also covers the use of internet and its application in data search.	• 1 To write programs to determine lattice energy, half-life, normality, molarity, molality • To present structure based drug designing in both 2D and 3D
C6SB6	Green Chemistry	Global	This course highlights the need for green chemistry approach which is the need of hour to protect the environment from hazardous chemical pollution.	• To differentiate between yield and atom economy • To interpret the concept of Stereo selectivity, Chemo selectivity and Regio selectivity

C6CC15	Inorganic Chemistry Practicals	Global	This paper deals with the preparation of some inorganic complexes and gravimetric estimation of metal ions	• Acquire the knowledge of concept of gravimetric estimations. • Recognise the role of reagents in chemistry.
C6CC16	Organic Chemistry Practicals	Global	This paper deals with the preparation of some organic Compounds and analysis of organic compounds.	• Recognize the usage of apparatus and laboratory reagents. • Relate the experimental observations with theory behind practicals.
C6CC17	Physical Chemistry Practicals	Global	This paper involves the experimental studies on Rast method, determination of transition temperature, phase diagrams,	• Experience in some scientific methods employed in basic and applied physical chemistry • Developed skills in procedures and instrumental methods applied in analytical and practical tasks of

			&electro chemistry	physical chemistry
C6CC17	Green Chemistry Practicals	Global	This paper includes the greener methods of preparation of Organic compounds and nano particles	• To understand green synthetic methods • To familiarise the synthesis of silver nano particle by green approach

2018 - 2019

COURSE CODE	COURSE TITLE	NATURE OF THE COURSE (LOCAL/ NATIONAL/ REGIONAL/ GLOBAL)	COURSE DESCRIPTION	COURSE OBJECTIVES
C1CC1	Inorganic Chemistry -I	Regional	This course deals with the basics of chemistry required for UG programme	• To comprehend the fundamental properties of atoms, molecules, and the various states of matter • To classify the electronic structure of atoms and its

				influence on chemical properties
C1CC2	Organic Chemistry -I	Global	This paper deals with electron displacement effects, Fundamentals of reaction mechanism	• Recognize the basic practical skills for synthetic methods of alkenes, and alkyl halide • Know the rules for naming different organic compounds
C1NME1	Profitable Home Industries	Global	This course is designed for the students to become self-employed by training them in the preparation of household articles	• To interpret the hazardous chemicals used in cosmetics. • To prepare the various house hold items in laboratory
Z1ACC1	Allied Chemistry-I	National	This paper deals with the concept of chemical bonding – detailed study of VB Theory & MO Theory	• To predict the geometry of any molecule with the help of VB and VSEPR theory • To construct M.O diagram for homonuclear diatomic molecule

			and types of Organic Reactions	
N1ACC1	Allied Chemistry-I	National	This paper deals with the concept of chemical bonding – detailed study of VB Theory & MO Theory. Types of Organic Reactions	• To predict the geometry of any molecule with the help of VB and VSEPR theory • To construct M.O diagram for homo nuclear diatomic molecule
C2CC3	Inorganic Chemistry -Ii	Regional	This paper deals with the theories of bonding and the chemistry of III, IV, V & VI group elements.	• To categorize the soft, hard and border line acids • To understand the synthetic importance of organometallics
C2CC4	Organic Chemistry – II	Regional	This course covers the topics alkenes, alkadienes, alkynes	• Enlighten the relationship between the structure and acidity of the compounds

			and organometallics with special emphasis on their synthetic applications	• Interpret the concept of resonance and stability of compounds
C2CC5	Profitable Home Industries	Global	This course is designed for the students to become self-employed by training them in the preparation of household articles	• To interpret the hazardous chemicals used in cosmetics. • To prepare the various house hold items in laboratory
Z2ACC2	Allied Chemistry- II	National	This paper gives a basic understanding of chemistry to other major students as allied paper	• To illustrate and tabulate the reactions of different functional groups. • To understand the kinetics of a chemical reaction and to predict the order of a particular reaction
N2ACC2	Allied	National	This paper gives a	• To illustrate and tabulate the

	Chemistry- II		basic understanding of chemistry to other major students as allied paper.	reactions of different functional groups. • To understand the kinetics of a chemical reaction and to predict the order of a particular reaction
C2CC5	Volumetric Analysis	Global	This course trains the students to prepare the solutions of different concentrations and to estimate quantitatively by different techniques	• To apply the principles of volumetric analysis in various estimations. • To estimate the amount of calcium using permangano metric method
Z2ACC3 & N2ACC3	Allied Practicals	National	This course trains the students to estimate the solutions quantitatively by different techniques.	• Select the specific titric method to estimate the amount of analyte present in the given solution. • Apply the expressions and equations to calculate the strength of solutions

C3CC6	Organic And Inorganic Chemistry	Regional	This paper deals with the concept of aromaticity and the inorganic chemistry part of the paper deals with the general characteristics of elements	• To interpret the concept of aromaticity and the main properties of aromatic compounds. • To correlate different bond types of carbon and its hybrid orbitals.
C3CC7	Physical Chemistry-I	Regional	This course provides a detailed study of Gaseous state, Solutions, Theory of dilute, solutions and Radio activity	• Calculate mass defect, packing fraction and binding energy for any nuclei • Predict the growing rate, mechanism and age of plants using radioactive elements
C3SB1	Agricultural Chemistry	Global	The Course gives an introduction to soil and fertilizers and also gives the effect of	• To recognise the importance of soil • To recall the names of fertilizers

			pesticides.	
P3ACC1	Allied Chemistry-I	National	This paper deals with topics namely bonding and shapes of molecules. Certain physical chemistry portions such as chemical kinetics, thermodynamics are included	• To comprehend the fundamental theories of Valence Bond, types of overlapping and VSEPR. • To classify the shapes of covalent molecules
C4CC8	Inorganic Chemistry-III	Global	The Course enables the students to gain knowledge on the chemistry of coordination compounds, carbonyl compounds and "F' block elements.	• Get an overview about the reaction mechanism of metal complexes • Know the structure and bonding of important coordination compounds

C4CC9	Physical Chemistry-I	Regional	This course provides an elaborate study of chemical kinetics, solid state and distribution law.	• To calculate lattice energy of crystalline solids • To distinguish order and molecularity of a chemical reaction
C4SB2	Natural And Synthetic Dyes	Global	This paper highlights the uses of dyes in our day today life.es in dyes	• To know and comprehend the principle and theories of dyes • To identify the chromophoric groups and auxochromes
P4ACC2	Allied Chemistry- II	National	This course gives a detailed study of periodic properties, electrochemistry & photochemistry.	• To predict the periodicity in the periodic table. • To construct an electrochemical cell diagram and identifying the anode, cathode.
C4CC10	Qualitative Analysis	Global	This paper involves the analysis of inorganic mixtures an acid and	• To identify the group cations • To analyse the presence acid and basic radicals in the given

			basic radicals qualitatively.	mixture of acid
P4ACC3	Allied Practicals	National	This course trains the students to estimate the solutions quantitatively by different techniques.	• To select the specific titric method to estimate the amount of analyte present in the given solution. • To apply the expressions and equations to calculate the strength of solutions
C5CC11	Organic Chemistry – III	Regional	This course provides an elaborate study of the preparation, reactions and synthetic application of organic compounds	• To analyze the synthetic importance of reactive methylene compounds • To generalize the characteristic features of optical isomers and geometrical isomers
C5ME1	Spectroscopy	Global	This paper will be of much use of the students to take up	• To identify various functional groups present in organic molecules using IR frequency.

			higher studies.	• To predict the number and nature of protons/ carbons in organic molecules in 1H-NMR/ 13C-NMR spectroscopy
C5ME2	Bio Chemistry	Regional	This course gives an overview of classification of enzyme and mechanism of enzyme action	• To identify the various metabolic reactions • To understand the importance of nucleic acids
C5SB3	Medicinal Chemistry	Global	This paper highlights the causes of common diseases the role of vitamin for the healthy life and the importance of hormones	• To study the mechanism of drug action • To determine the designing and binding of drugs with receptors
C5SB4	Nano Chemistry	Global	This paper deals with	• Learn about the background on

			study of synthesis, properties, structure and applications of nano particles..	Nanoscience . • Understand the synthesis of nanomaterials and their application and the impact of nanomaterials on environ
C6CC13	Organic Chemistry- IV	Regional	This paper includes the topics, Polynuclear Hydrocarbons, Heterocyclic Compounds, Amino Acids and Proteins, Alkaloids and terpenes.	• To explicate the structures of Citral, Dipentene and Camphor. • To distinguish the properties of quinolin and isoquinolin
C6CC14	Physical Chemistry- IV	Regional	This course gives a detailed study of electrochemistry &photochemistry	• Calculate the cell potential for a nonstandard cell. • Know the chemical reactions used in a lead-acid battery
C6ME3	Advanced	Global	The course is offered to	• To sketch Frontier molecular

	Organic Chemistry		expose the advanced topics in the field of organic chemistry.	orbital in photochemistry. • To differentiate the molecular rearrangements and to solve the simple problems
C6ME5	Advanced Physical Chemistry	Global	The course is offered to expose the advanced topics in the field of physical chemistry.	• To understand the theories behind the spectral techniques like MW.IR,NMR and ESR • To study the applications of the above techniques to elucidate the structures of molecules
C6SB5	Computers in Chemistry	Global	This course deals with the use of computers in molecular modeling and drug design and also covers the use of internet and its application in data	• 1 To write programs to determine lattice energy, half-life, normality, molarity, molality • To present structure based drug designing in both 2D and 3D

			search.	
C6SB6	Green Chemistry	Global	This course highlights the need for green chemistry approach which is the need of hour to protect the environment from hazardous chemical pollution.	• To differentiate between yield and atom economy • To interpret the concept of Stereo selectivity, Chemo selectivity and Regio selectivity
C6CC15	Inorganic Chemistry Practicals	Global	This paper deals with the preparation of some inorganic complexes and gravimetric estimation of metal ions	• Acquire the knowledge of concept of gravimetric estimations. • Recognise the role of reagents in chemistry.
C6CC16	Organic Chemistry	Global	This paper deals with the preparation of	• Recognize the usage of apparatus and laboratory reagents.

	Practicals		some organic Compounds and analysis of organic compounds.	• Relate the experimental observations with theory behind practicals
C6CC17	Physical Chemistry Practicals	Global	This paper involves the experimental studies on Rast method, determination of transition temperature, phase diagrams, & electro chemistry	• Experience in some scientific methods employed in basic and applied physical chemistry • Developed skills in procedures and instrumental methods applied in analytical and practical tasks of physical chemistry
C6CC18	Green Chemistry Practicals	Global	This paper includes the greener methods of preparation of Organic compounds and nano particles	• To understand green synthetic methods • To familiarise the synthesis of silver nanoparticle

2017 - 2018

COURSE CODE	COURSE TITLE	NATURE OF THE COURSE (LOCAL/ NATIONAL/ REGIONAL/ GLOBAL)	COURSE DESCRIPTION	COURSE OBJECTIVES
C1CC1	Inorganic Chemistry -I	Regional	This course deals with the basics of chemistry required for UG programme	• To comprehend the fundamental properties of atoms, molecules, and the various states of matter • To classify the electronic structure of atoms and its influence on chemical properties
C1CC2	Organic Chemistry -I	Global	This paper deals with electron displacement effects, Fundamentals of reaction mechanism	• Recognize the basic practical skills for synthetic methods of alkenes, and alkyl halide • Know the rules for naming

			,	different organic compound
C1NME1	Profitable Home Industries	Global	This course is designed for the students to become self-employed by training them in the preparation of household articles	• To interpret the hazardous chemicals used in cosmetics. • To prepare the various house hold items in laboratory
Z1ACC1	Allied Chemistry- I	National	This paper deals with the concept of chemical bonding – detailed study of VB Theory & MO Theory and types of Organic Reactions	• To predict the geometry of any molecule with the help of VB and VSEPR theory • To construct M.O diagram for homo nuclear diatomic molecule
N1ACC1	Allied Chemistry-I	National	This paper deals with the concept of chemical bonding –	• To predict the geometry of any molecule with the help of VB and VSEPR theory

			detailed study of VB Theory & MO Theory. Types of Organic Reaction	• To construct M.O diagram for homo nuclear diatomic molecule
C2CC3	Inorganic Chemistry -II	Regional	This paper deals with the theories of bonding and the chemistry of III, IV, V & VI group elements.	• To categorize the soft, hard and border line acids • To understand the synthetic importance of organometallics
C2CC4	Organic Chemistry – II	Regional	This course covers the topics alkenes, alkadienes, alkynes and organometallics with special emphasis on their synthetic applications	• Enlighten the relationship between the structure and acidity of the compounds • Interpret the concept of resonance and stability of compounds

C2NME2	Profitable Home Industries	Global	This course is designed for the students to become self-employed by training them in the preparation of household articles	• To interpret the hazardous chemicals used in cosmetics. • To prepare the various house hold items in laboratory
Z2ACC2	Allied Chemistry- II	National	This paper gives a basic understanding of chemistry to other major students as allied paper.	• To illustrate and tabulate the reactions of different functional groups. • To understand the kinetics of a chemical reaction and to predict the order of a particular reaction
N2ACC2	Allied Chemistry- II	National	This paper gives a basic understanding of chemistry to other major students as allied paper.	• To illustrate and tabulate the reactions of different functional groups. • To understand the kinetics of a chemical reaction and to predict

				the order of a particular reaction
C2CC5	Volumetric Analysis	Global	This course trains the students to prepare the solutions of different concentrations and to estimate quantitatively by different techniques	• To apply the principles of volumetric analysis in various estimations. • To estimate the amount of calcium using permangano metric method
Z2ACC3 & N2ACC3	Allied Practicals	National	This course trains the students to estimate the solutions quantitatively by different techniques.	• select the specific titric method to estimate the amount of analyte present in the given solution. • Apply the expressions and equations to calculate the strength of solutions
C3CC6	Organic and Inorganic Chemistry	Regional	This paper deals with the concept of aromaticity and the	• To interpret the concept of aromaticity and the main properties of aromatic

			inorganic chemistry part of the paper deals with the general characteristics of elements	compounds. • To correlate different bond types of carbon and its hybrid orbitals.
C3CC7	Physical Chemistry-I	Regional	This course provides a detailed study of Gaseou state, Solutions, Theory of dilute, solutions and Radio activity	• Calculate mass defect, packing fraction and binding energy for any nuclei • Predict the growing rate, mechanism and age of plants using radioactive elements
C3SB1	Agricultural Chemistry	Global	The Course gives an introduction to soil and fertilizers and also gives the effect of pesticides.	• To recognise the importance of soil • To recall the names of fertilizers
P3ACC1	Allied Chemistry-	National	This paper deals with	• To comprehend the fundamental

	I		topics namely bonding and shapes of molecules. Certain physical chemistry portions such as chemical kinetics, thermodynamics are included	theories of Valence Bond, types of overlapping and VSEPR. • To classify the shapes of covalent molecules
C4CC8	Inorganic Chemistry- III	Global	The Course enables the students to gain knowledge on the chemistry of coordination compounds, carbonyl compounds and "F' block elements.	• Get an overview about the reaction mechanism of metal complexes • Know the structure and ending of important coordination compounds
C4CC9	Physical Chemistry-I	Regional	This course provides an elaborate study of	• To calculate lattice energy of crystalline solids

			chemical kinetics, solid state and distribution law.	• To distinguish order and molecularity of a chemical reaction
C4SB2	Organic Farming	Global	.The paper is to make the students aware of the concepts of organic farming.	• To recall the principles of health-ecology- principle of care. • To understand the concepts of organic farming- world of organic agriculture.
P4ACC2	Allied Chemistry-II	National	This course gives a detailed study of periodic properties, electrochemistry & photochemistry.	• To predict the periodicity in the periodic table. • To construct an electrochemical cell diagram and identifying the anode, cathode.
C4CC10	Qualitative Analysis	Global	This paper involves the analysis of inorganic mixtures an acid and	• To identify the group cautions • To analyse the presence acid and basic radicals in the given

			basic radicals qualitatively.	mixture of acid
P4ACC3	Allied Practicals	National	This course trains the students to estimate the solutions quantitatively by different techniques.	• To select the specific titric method to estimate the amount of analyte present in the given solution. • To apply the expressions and equations to calculate the strength of solutions
C5CC11	Organic Chemistry – III	Regional	This course provides an elaborate study of the preparation, reactions and synthetic application of organic compounds	• To analyze the synthetic importance of reactive methylene compounds • To generalize the characteristic features of optical isomers and geometrical isomers
C5ME1	Spectroscopy	Global	This paper will be of much use of the	• To identify various functional groups present in organic

			students to take up higher studies.	molecules using IR frequency. • To predict the number and nature of protons/ carbons in organic molecules in 1H-NMR/ 13C-NMR spectroscopy
C5ME2	Bio Chemistry	Regional	This course gives an overview of classification of enzyme and mechanism of enzyme action	• To identify the various metabolic reactions • To understand the importance of nucleic acids
C5SB3	Medicinal Chemistry	Global	This paper highlights the causes of common diseases the role of vitamin for the healthy life and the importance of hormones	• To study the mechanism of drug action • To determine the designing and binding of drugs with receptors

C5SB4	Natural and Synthetic Dyes	Global	This paper highlights the uses of dyes in our day today life.	• To know and comprehend the principle and theories of dyes • To identify the chromophoric groups and auxochromes in dyes
C6CC13	Organic Chemistry- IV	Regional	This paper includes the topics, Polynuclear Hydrocarbons, Heterocyclic Compounds, Amino Acids and Proteins, Alkaloids and terpenes.	• To explicate the structures of Citral, Dipentene and Camphor. • To distinguish the properties of quinolin and isoquinolin
C6CC14	Physical Chemistry- IV	Regional	This course gives a detailed study of electrochemistry & photochemistry	• Calculate the cell potential for a nonstandard cell. • Know the chemical reactions used in a lead-acid battery
C6ME3	Advanced Organic	Global	The course is offered to expose the	• To sketch Frontier molecular orbitals in photochemistry.

	Chemistry		advanced topics in the field of organic chemistry.	• To differentiate the molecular rearrangements and to solve the simple problems
6ME5	Advanced Physical Chemistry	Global	The course is offered to expose the advanced topics in the field of physical chemistry.	• To understand the theories behind the spectral techniques like MW.IR,NMR and ESR • To study the applications of the above techniques to elucidate the structures of molecules
C6SB5	Computers In Chemistry	Global	This course deals with the use of computers in molecular modelling and drug design and also covers the use of internet and its application in data search.	• To write programs to determine lattice energy, half-life, normality, molarity, molality • To present structure based drug designing in both 2D and 3D

C6SB6	Green Chemistry	Global	This course highlights the need for green chemistry approach which is the need of hour to protect the environment from hazardous chemical pollution.	• To differentiate between yield and atom economy • To interpret the concept of Stereo selectivity, Chemo selectivity and Regio selectivity
C6CC15	Inorganic Chemistry Practicals	Global	This paper deals with the preparation of some inorganic complexes and gravimetric estimation of metal ions	• Acquire the knowledge of concept of gravimetric estimations. • Recognise the role of reagents in chemistry.
C6CC16	Organic Chemistry Practicals	Global	This paper deals with the preparation of some organic Compounds and	• Recognize the usage of apparatus and laboratory reagents. • Relate the experimental observations with theory behind

			analysis of organic compounds	practical's.asis
C6CC17	Physical Chemistry Practicals	Global	This paper involves the experimental studies on Rast method, determination of transition temperature, phase diagrams, & electro chemistry	• Experience in some scientific methods employed in basic and applied physical chemistry • Developed skills in procedures and instrumental methods applied in analytical and practical tasks of physical chemistry

2016 - 2017

COURSE CODE	COURSE TITLE	NATURE OF THE COURSE (LOCAL/ NATIONAL/ REGIONAL/ GLOBAL)	COURSE DESCRIPTION	COURSE OBJECTIVES
C1CC1	Inorganic Chemistry - I	Regional	This course deals with the basics of chemistry	• To comprehend the fundamental properties of atoms, molecules,

			required for UG programme	and the various states of matter • To classify the electronic structure of atoms and its influence on chemical properties
C1CC2	Organic Chemistry - I	Global	This paper deals with electron displacement effects, Fundamentals of reaction mechanism ,	• Recognize the basic practical skills for synthetic methods of alkenes, and alkyl halide • Know the rules for naming different organic compounds
C1NME1	Profitable Home Industries	Global	This course is designed for the students to become self-employed by training them in the preparation of household articles	• To interpret the hazardous chemicals used in cosmetics. • To prepare the various house hold items in laboratory
Z1ACC1	Allied Chemistry - I	National	This paper deals with the concept of	• To predict the geometry of any molecule with the help of VB and

			chemical bonding – detailed study of VB Theory & MO Theory and types of Organic Reactions	VSEPR theory • To construct M.O diagram for homo nuclear diatomic molecule
N1ACC1	Allied Chemistry - I	National	This paper deals with the concept of chemical bonding – detailed study of VB Theory & MO Theory. Types of Organic Reactions	• To predict the geometry of any molecule with the help of VB and VSEPR theory • To construct M.O diagram for homo nuclear diatomic molecule
C2CC3	Inorganic Chemistry - II	Regional	This paper deals with the theories of bonding and the chemistry of III, IV, V & VI group	• To categorize the soft, hard and border line acids • To understand the synthetic importance of rgano metallics

			elements.	
C2CC4	Inorganic Chemistry - II	Regional	This course covers the topics alkenes, alkadienes, alkynes and organo metallics with special emphasis on their synthetic applications	• Enlighten the relationship between the structure and acidity of the compounds • Interpret the concept of resonance and stability of compounds
C2NME2	Profitable Home Industries	Global	This course is designed for the students to become self-employed by training them in the preparation of household articles	• To interpret the hazardous chemicals used in cosmetics. • To prepare the various house hold items in laboratory
Z2ACC2	Allied Chemistry-II	National	This paper gives a basic understanding of chemistry to other	• To illustrate and tabulate the reactions of different functional groups.

			major students as allied paper.	• To understand the kinetics of a chemical reaction and to predict the order of a particular reaction
N2ACC2	Allied Chemistry- II	National	This paper gives a basic understanding of chemistry to other major students as allied paper.	• To illustrate and tabulate the reactions of different functional groups. • To understand the kinetics of a chemical reaction and to predict the order of a particular reaction
C2CC5	Volumetric Analysis	Global	This course trains the students to prepare the solutions of different concentrations and to estimate quantitatively by different techniques	• To apply the principles of volumetric analysis in various estimations. • To estimate the amount of calcium using permangano metric method
Z2ACC3 &	Allied Practicals	National	This course trains the students to estimate	• select the specific titric method to estimate the amount of analyte

N2ACC3			the solutions quantitatively by different techniques.	present in the given solution. • Apply the expressions and equations to calculate the strength of solutions
C3CC6	Organic And Inorganic Chemistry	Regional	This paper deals with the concept of aromaticity and the inorganic chemistry part of the paper deals with the general characteristics of elements	• To interpret the concept of aromaticity and the main properties of aromatic compounds. • To correlate different bond types of carbon and its hybrid orbitals.
C3CC7	Physical Chemistry-I	Regional	This course provides a detailed study of Gaseous state, Solutions, Theory of dilute, solutions	• Calculate mass defect, packing fraction and binding energy for any nuclei • Predict the growing rate, mechanism and age of plants using radioactive elements

			and Radio activity	
C3SB1	Pollution And Its Control Measure	Global	This paper deals with different types of pollutions in environment	• To recognise the importance of clean environment • To recall the names of pollutants
P3ACC1	Allied Chemistry-I	National	This paper deals with topics namely bonding and shapes of molecules. Certain physical chemistry portions such as chemical kinetics, thermodynamics are included	• To comprehend the fundamental theories of Valence Bond, types of overlapping and VSEPR. • To classify the shapes of covalent molecules
C4CC8	Inorganic	Global	The Course enables the	• Get an overview about the

	Chemistry-III		students to gain knowledge on the chemistry of coordination compounds, carbonyl compounds and "F' block elements.	reaction mechanism of metal complexes • Know the structure and bonding of important coordination compounds
C4CC9	Physical Chemistry-I	Regional	This course provides an elaborate study of chemical inetics, solid state and distribution law.	• To calculate lattice energy of crystalline solids • To distinguish order and molecularity of a chemical reaction
C4SB2	Organic Farming	Global	The paper is to make the students aware of the concepts of organic farming.	• To recall the principles of health-ecology- principle of care. • To understand the concepts of organic farming- world of organic agriculture.

P4ACC2	Allied Chemistry-II	National	This course gives a detailed study of periodic properties, electrochemistry & photochemistry.	• To predict the periodicity in the periodic table. • To construct an electrochemical cell diagram and identifying the anode, cathode.
C4CC10	Qualitative Analysis	Global	This paper involves the analysis of inorganic mixtures an acid and basic radicals qualitatively.	• To identify the group cautions • To analyse the presence acid and basic radicals in the given mixture of acid
P4ACC3	Allied Practicals	National	This course trains the students to estimate the solutions quantitatively by different techniques.	• To select the specific titric method to estimate the amount of analyte present in the given solution. • To apply the expressions and equations to calculate the strength of solutions
C5CC11	Organic	Regional	This course provides	• To analyze the synthetic

	Chemistry – III		an elaborate study of the preparation, reactions and synthetic application of organic compounds	importance of reactive methylene compounds • To generalize the characteristic features of optical isomers and geometrical isomers
C5ME1	Spectroscopy	Global	This paper will be of much use of the students to take up higher studies.	• To identify various functional groups present in organic molecules using IR frequency. • To predict the number and nature of protons/ carbons in organic molecules in 1H-NMR/ 13C-NMR spectroscopy
C5ME2	Bio Chemistry	Regional	This course gives an overview of classification of enzyme and mechanism of enzyme action	• To identify the various metabolic reactions • To understand the importance of nucleic acids

C5SB3	Medicinal Chemistry	Global	This paper highlights the causes of common diseases the role of vitamin for the healthy life and the importance of hormones	• To study the mechanism of drug action • To determine the designing and binding of drugs with receptors
C5SB4	Natural And Synthetic Dyes	Global	This paper highlights the uses of dyes in our day today life.	• To know and comprehend the principle and theories of dyes • To identify the chromophoric groups and auxochromes in dyes
C6CC13	Organic Chemistry-IV	Regional	This paper includes the topics, Polynuclear Hydrocarbons, Heterocyclic Compounds, Amino Acids and Proteins, Alkaloids and terpenes.	• To explicate the structures of Citral, Dipentene and Camphor. • To distinguish the properties of quinolin and isoquinolin

C6CC14	Physical Chemistry-IV	Regional	This course gives a detailed study of electrochemistry & photochemistry	• Calculate the cell potential for a nonstandard cell. • Know the chemical reactions used in a lead-acid battery
C6ME3	Advanced Organic Chemistry	Global	The course is offered to expose the advanced topics in the field of organic chemistry.	• To sketch Frontier molecular orbitals in photochemistry. • To differentiate the molecular rearrangements and to solve the simple problems
C6ME5	Advanced Physical Chemistry	Global	The course is offered to expose the advanced topics in the field of physical chemistry.	• To understand the theories behind the spectral techniques like MW.IR,NMR and ESR • To study the applications of the above techniques to elucidate the structures of molecules
C6SB5	Computers in Chemistry	Global	This course deals with the use of computers	• To write programs to determine lattice energy, half-life, normality,

			in molecular modelling and drug design and also covers the use of internet and its application in data search.	molarity, molality • To present structure based drug designing in both 2D and 3D
C6SB6	Green Chemistry	Global	This course highlights the need for green chemistry approach which is the need of hour to protect the environment from hazardous chemical pollution.	• To differentiate between yield and atom economy • To interpret the concept of Stereo selectivity, Chemo selectivity and Regio selectivity
C6CC15	Inorganic Chemistry Practicals	Global	This paper deals with the preparation of some inorganic complexes and	• Acquire the knowledge of concept of gravimetric estimations. • Recognise the role of reagents in chemistry

			gravimetric estimation of metal ions	
C6CC16	Organic Chemistry Practicals	Global	This paper deals with the preparation of some organic Compounds and analysis of organic compounds.	• Recognize the usage of apparatus and laboratory reagents. • Relate the experimental observations with theory behind practical's.asis
C6CC17	Physical Chemistry Practicals	Global	This paper involves the experimental studies on Rast method, determination of transition temperature, phase diagrams, & electro chemistry	• Experience in some scientific methods employed in basic and applied physical chemistry • Developed skills in procedures and instrumental methods applied in analytical and practical tasks of physical chemistry

2015 - 2016

COURSE CODE	COURSE TITLE	NATURE OF THE COURSE (LOCAL/ NATIONAL/ REGIONAL/ GLOBAL)	COURSE DESCRIPTION	COURSE OBJECTIVES
C1CC1	Inorganic Chemistry -I	Regional	This course deals with the basics of chemistry required for UG programme	• To comprehend the fundamental properties of atoms, molecules, and the various states of matter • To classify the electronic structure of atoms and its influence on chemical properties
C1CC2	Organic Chemistry - I	Global	This paper deals with electron displacement effects, Fundamentals of	• Recognize the basic practical skills for synthetic methods of alkenes, and alkyl halide • Know the rules for naming different organic compounds

			reaction mechanism	
C1NME1	Profitable Home Industries	Global	This course is designed for the students to become self-employed by training them in the preparation of household articles	• To interpret the hazardous chemicals used in cosmetics. • To prepare the various house hold items in laboratory
Z1ACC1	Allied Chemistry- I	National	This paper deals with the concept of chemical bonding – detailed study of VB Theory & MO Theory and types of Organic	• To predict the geometry of any molecule with the help of VB and VSEPR theory • To construct M.O diagram for homo nuclear diatomic molecule

			Reactions	
N1ACC1	Allied Chemistry- I	National	This paper deals with the concept of chemical bonding detailed study of VB Theory & MO Theory. Types of Organic Reactions	• To predict the geometry of any molecule with the help of VB and VSEPRB theory • To construct M.O diagram for homo nuclear diatomic molecule
C2CC3	Inorganic Chemistry - II	Regional	This paper deals with the theories of bonding and the chemistry of III, IV, V & VI group elements.	• To categorize the soft, hard and border line acids • To understand the synthetic importance of organometallics
C2CC4	Organic Chemistry – II	Regional	This course covers the topics	• Enlighten the relationship between the structure and acidity of the compounds

			alkenes, alkadienes, alkynes and organometallics with special emphasis on their synthetic applications	• Interpret the concept of resonance and stability of compounds
C2NME2	Profitable Home Industries	Global	This course is designed for the students to become self-employed by training them in the preparation of household articles	• To interpret the hazardous chemicals used in cosmetics. • To prepare the various house hold items in laboratory
Z2ACC2	Allied	National	This paper gives a basic	• To illustrate and tabulate the reactions of different functional groups.

	Chemistry- II		understanding of chemistry to other major students as allied paper.	• To understand the kinetics of a chemical reaction and to predict the order of a particular reaction
N2ACC2	Allied Chemistry- II	National	This paper gives a basic understanding of chemistry to other major students as allied paper.	• To illustrate and tabulate the reactions of different functional groups. • To understand the kinetics of a chemical reaction and to predict the order of a particular reaction
C2CC5	Volumetric Analysis	Global	This course trains the students to prepare the solutions of different concentrations and to estimate	• To apply the principles of volumetric analysis in various estimations. • To estimate the amount of calcium using permangano metric method

			quantitatively by different techniques	
Z2ACC3 & N2ACC3	Allied Practicals	National	This course trains the students to estimate the solutions quantitatively by different techniques.	• select the specific titric method to estimate the amount of analyte present in the given solution. • Apply the expressions and equations to calculate the strength of solutions
C3CC6	Organic And Inorganic Chemistry	Regional	This paper deals with the concept of aromaticity and the inorganic chemistry part of the paper deals with the general characteristics of	• To interpret the concept of aromaticity and the main properties of aromatic compounds. • To correlate different bond types of carbon and its hybrid orbitals.

			elements	
C3CC7	Physical Chemistry- I	Regional	This course provides a detailed study of Gaseous state, Solutions, Theory of dilute, solutions and Radio activity	• Calculate mass defect, packing fraction and binding energy for any nuclei • Predict the growing rate, mechanism and age of plants using radioactive elements
C3SB1	Pollution And Its Control Measure	Global	This paper deals with different types of pollutions in environment	• To recognise the importance of clean environment • To recall the names of pollutants
P3ACC1	Allied Chemistry- I	National	This paper deals with topics namely bonding and shapes of	• To comprehend the fundamental theories of Valence Bond, types of overlapping and VSEPR. • To classify the shapes of covalent

			molecules. Certain physical chemistry portions such as chemical kinetics, thermodynamics are included	molecules
C4CC8	Inorganic Chemistry- III	Global	The Course enables the students to gain knowledge on the chemistry of coordination compounds, carbonyl compounds and "F' block elements.	• Get an overview about the reaction mechanism of metal complexes • Know the structure and bonding of important coordination compounds

C4CC9	Physical Chemistry- I	Regional	This course provides an elaborate study of chemical kinetics, solid state and distribution law.	• To calculate lattice energy of crystalline solids • To distinguish order and molecularity of a chemical reaction
C4SB2	Forensic Science	Global	This paper deals with principles and procedures of crime investigations	• To classify blood grouping in human body • To identify the type of poison
P4ACC2	Allied Chemistry- II	National l	This course gives a detailed study of periodic properties, electrochemistry	• To predict the periodicity in the periodic table. • To construct an electrochemical cell diagram and identifying the anode, cathode.

			& photochemistry.	
C4CC10	Qualitative Analysis	Global	This paper involves the analysis of inorganic mixtures an acid and basic radicals qualitatively.	• To identify the group cations • To analyse the presence acid and basic radicals in the given mixture of acid
P4ACC3	Allied Practicals	National	This course trains the students to estimate the solutions quantitatively by different techniques.	• To select the specific titric method to estimate the amount of analyte present in the given solution. • To apply the expressions and equations to calculate the strength of solutions
C5CC11	Organic	Regional	This course	• To analyze the synthetic importance of

	Chemistry – III		provides an elaborate study of the preparation, reactions and synthetic application of organic compounds	reactive methylene compounds • To generalize the characteristic features of optical isomers and geometrical isomers
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			mechanism of enzyme action	
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C5SB4	Natural And Synthetic Dyes	Global	This paper highlights the uses of dyes in our day today life.	• To know and comprehend the principle and theories of dyes • To identify the chromophoric groups and auxochromes in dyes
C6CC13	Organic Chemistry- IV	Regional	This paper includes the topics, Polynuclear	• To explicate the structures of Citral, Dependence and Camphor. • To distinguish the properties of quinolin and isoquinolin

			Hydrocarbons, Heterocyclic Compounds, Amino Acids and Proteins, Alkaloids and terpenes.	
C6CC14	Physical Chemistry- IV	Regional	This course gives a detailed study of electrochemistry & photochemistry	• Calculate the cell potential for a nonstandard cell. • Know the chemical reactions used in a lead-acid battery
C6ME3	Advanced Organic Chemistry	Global	The course is offered to expose the advanced topics in the field of organic chemistry.	• • To sketch Frontier molecular orbitals in photochemistry. • To differentiate the molecular rearrangements and to solve the simple problems

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C6SB6	Green	Global	This course highlights the	• To differentiate between yield and atom economy

	Chemistry		need for green chemistry approach which is the need of hour to protect the environment from hazardous chemical pollution.	• To interpret the concept of Stereo selectivity, Chemo selectivity and Regio selectivity
C6CC15	Inorganic Chemistry Practicals	Global	This paper deals with the preparation of some inorganic complexes and gravimetric estimation of metal ions	• Acquire the knowledge of concept of gravimetric estimations. • Recognise the role of reagents in chemistry.
C6CC16	Organic Chemistry Practicals	Global	This paper deals with the preparation of some organic	• Recognize the usage of apparatus and laboratory reagents. • Relate the experimental observations

			Compounds and analysis of organic compounds.	with theory behind practical's asis
C6CC17	Physical Chemistry Practicals	Global	This paper involves the experimental studies on Rast method, determination of transition temperature, phase diagrams, & electro chemistry	• Experience in some scientific methods employed in basic and applied physical chemistry • Developed skills in procedures and instrumental methods applied in analytical and practical tasks of physical chemistry